

UNITED STATE DEPARTMENT OF COMMERCE Patent and Trademark Office

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Washington, D.C. 20231

FILING DATE FIRST NAMED INVENTOR APPLICATION NO. ATTORNEY DOCKET NO. F-5366 D 07/08/98 BOGGS 09/111,915 **EXAMINER** IM62/0803 WARD, R BRADFORD R L PRICE BAXTER INTERNATIONAL INC ART UNIT PAPER NUMBER RT 120 AND WILSON ROAD 1723 P 0 B0X 490 ROUND LAKE IL 60073 DAYE MAILED: 08/03/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

CASE F. - 53 66 LS.

DIRT. DATE H. - 2 - 3 BEEN BY ATTY.

FINAL DATE 2 - 3 - LOWDRESP. SENT.

SUBJECT Of feel Certain S. Mo.

PEPENVED

AUG 05 1999

FRIENT LAW/ DIVIECH

Application No.

09/111,916

Boggs et al

Examiner

Office Action Summary

Richard W. Ward

Group A

Art Unit			
1723			

X Responsive to communication(s) filed on Mar 5, 1999	·
This action is FINAL.	
Since this application is in condition for allowance except for forma in accordance with the practice under Ex parte Quayle, 1935 C.D.	I matters, prosecution as to the merits is closed 11; 453 O.G. 213.
A shortened statutory period for response to this action is set to expire is longer, from the mailing date of this communication. Failure to respapplication to become abandoned. (35 U.S.C. § 133). Extensions of the STR 1.136(a).	ond within the period for response will cause the
Disposition of Claims	
X Claim(s) <u>1-39</u>	is/are pending in the application.
Of the above, claim(s) 12-36	is/are withdrawn from consideration.
☐ Claim(s)	is/are allowed.
Claim(s)	
☐ Claims 8	
Application Papers	•
☑ See the attached Notice of Draftsperson's Patent Drawing Revie	w, PTO-948.
☐ The drawing(s) filed on is/are objected to b	y the Examiner.
☐ The proposed drawing correction, filed on	is □approved □disapproved.
☑ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119	
☐ Acknowledgement is made of a claim for foreign priority under \$	35 U.S.C. § 119(a)-(d).
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the pr	iority documents have been
_ received.	
received in Application No. (Series Code/Serial Number)	
received in this national stage application from the Interna	itional Bureau (PCT Rule 17.2(a)).
*Certified copies not received:	- 25 II S C & 110(a)
Acknowledgement is made of a claim for domestic priority unde	1 35 U.S.C. 3 119(8).
Attachment(s)	
Notice of References Cited, PTO-892	2 and 2
	<u> 2 ano 3</u>
☐ Interview Summary, PTO-413 ☑ Notice of Draftsperson's Patent Drawing Review, PTO-948	
☐ Notice of Informal Patent Application, PTO-152	•
— SEE OFFICE ACTION ON THE FOL	LOWING PAGES

Art Unit: 1723

DETAILED ACTION

Election/Restriction

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - Claims 1-11 and 37-39, drawn to a membrane, classified in class 210, subclass 490.
 - II. Claims 12-36, drawn to a method of making a membrane, classified in class 427, subclass 244.
- 2. The inventions are distinct, each from the other because of the following reasons: Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process -- see below for examples.
- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Art Unit: 1723

4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

- 5. During a telephone conversation with Andrew Kolomayets on 7/21/99 a provisional election was made with traverse to prosecute the invention of invention I, claims 1-11 and 37-39. Affirmation of this election must be made by applicant in replying to this Office action.

 Claims 12-36 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

7. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Art Unit: 1723

Specification

8. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 10. Claims 1-7, 9-11, 37-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Hagen et al (US 5,071,610). Hagen et al [610] discloses a flexible composite membrane comprising a particulate material immobilized within a polymeric matrix (figure 1), and a selectively permeable skin bonded to said membrane (column 12, lines 45-46), as recited in instant claim 1. Hagen et al [610] also discloses: polyurethane (column 9, line 27), as recited in instant claim 2; hydrophobic PTFE (column 9), as recited in instant claim 3; skin layers of varying size and composition (column 12, lines 38-48), as recited in instant claim 4; 30% polymer and 70% particulate (column 2, line 62), as recited in instant claims 5-6; supports (column 12, lines 43-44), as recited in instant claim 7; non-fiberized polymers (column 9), as recited in instant claim 9; thicknesses between 100 and 1500 microns, as recited in instant claims 10-11; particle diameters less than 20 microns (column 8, lines 46-47), as recited in

Art Unit: 1723-

instant claim 37 (other claim limitations recited above); a rippled membrane surface (see figure 1), as recited in instant claim 38; and a membrane thickness greater than 400 microns (column 12, lines 33-34), as recited in instant claim 39.

- 11. Claims 1-5, 7-11, and 37-38 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Mahendran et al (US 5,914,039). See especially: figures 3-4; column 7, lines 34-36; figure 2 (contoured); and column 3, line 53.
- 12. Claims 1-7, 9-11, and 37-39 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Pall et al (US 3,158,532). Pall et al [532] discloses composite membranes (column 9, line 61) which incorporate the recited materials, proportions, characteristics, layers, etc. see entire disclosure, especially columns 2-5.

Claim Rejections - 35 USC § 103

- 13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 14. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pall et al (US 3,158,532). Pall et al [532] discloses all aspects of the instant claim (see above) except for a polyester mesh support; however, Pall et al [532] does disclose the use of cloth supports (column 5, line 12), as well as the use of polyesters (column 3 and column 5). It would have

Art Unit: 1723

been obvious to one having ordinary skill in the art at the same time the invention was made to use a polyester mesh in place of the generically stated support of Pall et al [532] for the purpose of applying a well known inexpensive support which provides a desired degree of support for a particular filtration application.

15. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al [610]. Hagen et al [610] is expanded above. Claim 8 recites the additional limitation of a polyester mesh. Hagen et al [610] suggests a polymer support (column 12, line 45). Polyethylene mesh is a well-known polymer support for use with membranes. In the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the same time the invention was made to use a polyester mesh in place of the generically stated polymer support of Hagen et al [610] for the purpose of providing a desired degree of support for a particular filtration application.

Conclusion

- 16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mailvagnam et al (US 5,472,607) and McAllister et al (US 4,957,943) disclose skinned flexible composite membranes (see especially columns 11-12 of McAllister [943]).
- 17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard W. Ward whose telephone number is (703)305-0536. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM.

Art Unit: 1723 -...

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Walker, can be reached on (703)308-0457. The fax phone number for the organization where this application or proceeding is assigned is (703)305-3602.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703)308-0661.

R.W.W.

July 27, 1999

W. L. WALKER
PRIMARY EXAMINER
GROUP 1300